Appendix S2. List of all butterfly species collected at each study site (listed in alphabetical order by subfamilies), with total number of individuals observed.

I. Barro Colorado Island

HESPERIIDAE	
Eudaminae	
Aguna panama Austin & Mielke, 1998	1
Astraptes alector (Plötz, 1881)	3
Astraptes apastus (Cramer, 1777)	1
Astraptes creteus (Cramer, 1780)	4
Astraptes egregius (Butler, 1870)	1
Astraptes fulgerator (Walch, 1775)	2
Astraptes janeira (Stoll, 1781)	2
Astraptes sp. 1	2
Autochton longipennis (Hübner, 1818)	1
Bungalotis midas (Cramer, 1775)	1
Dyscophellus phraxanor (Hewitson, 1876)	2
Euriphellus euribates (Stoll, 1782)	1
Hyalothyrus neleus (Mabille, 1888)	2
Nascus phocus (Cramer, 1777)	1
Phanus albiapicalis Austin, 1993	2
Phanus marshallii (Kirby, 1880)	18
Phanus obscurior Kaye, 1925	2
Udranomia orcinus (C. & R. Felder, 1867)	1
Urbanus belli (Hayward, 1935)	1
Urbanus doryssus (Swainson, 1831)	1
Urbanus esmeraldus (Butler, 1877)	3
Urbanus sp. 1 near but not *doryssus* (Swainson, 1831)	1
Hesperiinae	
Eutychide sp. 1 (Hewitson, 1876)	2
Saliana sp. 1 near *salius* (Kaye, 1914)	3
Synapte puma (Latreille, 1824)	8
Synapte sp. 3	2
Synapte sp. 4	1
Thargella caura (Plötz, 1882)	11
Thargella sp. 2	2
Turesis complanula (Herrich-Schäffer, 1869)	4
Pyrginae	
Cyclosemia sp. 1 near *anastomosis* Mabille, 1878	1
Cycloglypha thrasibulus (Fabricius, 1793)	1
Pythonides proxenus (Goldman & Salvin, 1895)	2
Quadrus contubernalis (Mabille, 1883)	2
Unknown	
Unknown genus sp. 17	4
Unknown genus sp. 22	1
Unknown genus sp. 42	2
LYCAENIDAE	
Theclinae	
Arawacus lincoides (Draudt, 1917)	2
Calycopis cerata (Hewitson, 1877)	6
Calycopis sp. 4 near *puppius* (Goldman & Salvin, 1887)	2
Calycopis sp. 5 near *isobeon* (Butler & Druce, 1872)	1
Calycopis sp. 6	2
Celmia celmus (Cramer, 1775)	3
Chalybs janias (Cramer, 1779)	2
Eumaeus godartii (Boisduval, 1870)	1

Symbiopsis tanais (Goldman & Salvin, 1887)	1
Theritas hemon (Cramer, 1775)	1
Unknown	
Unknown genus sp. 13	1
Unknown genus sp. 15	2
Unknown genus sp. 16	1
NYMPHALIDAE	
Apaturinae	
Doxocopa clothilda (C. & R. Felder, 1867)	1
Biblinae	
Callicore lyca (Godman & Salvin, 1883)	1
Catonephele orites Stichel, 1898	4
Eunica chlororhoa Godman & Salvin, 1877	1
Pyrrhogyra sp. 1 near *crameri* Aurivillius 1882	8
Charaxinae	
Prepona laertes Fruhstorfer, 1905	1
Prepona dexamenus Hopffer, 1874	1
Cyrestinae	
Marpesia chiron (Fabricius, 1775)	2
Danainae	
Aeria eurimedia Godman & Salvin, 1879	4
Hypoleria lavinia Godman & Salvin, 1879	15
Hypothyris euclea (Haensch, 1909)	2
Mechanitis lysimnia Hewitson, 1860	1
Mechanitis polymnia Bates, 1863	1
Melinaea idae C. & R. Felder, 1862	10
Melinaea lilis Butler, 1873	1
Melinaea sp. 4 near *lilis* Butler, 1873	1
Melinaea sp. 2	3
Melinaea sp. 3	2
Heliconiinae	
Dryadula phaetusa (Linnaeus, 1758)	1
Dryas iulia (Fabricius, 1775)	4
Heliconius cydno Bates, 1864	14
Heliconius erato Doubleday, 1847	29
Heliconius hecale Bates, 1866	2
Heliconius sapho (Drury, 1782)	7
Heliconius sara Stichel, 1906	4
Laparus doris (Linnaeus, 1771)	2
Philaethria dido (Linnaeus, 1763)	9
Limenitidinae	
Adelpha basiloides (Bates, 1865)	2
Adelpha cocala (Boisduval, 1870)	1
Adelpha iphiclus (Linnaeus, 1758)	5
Nymphalinae	
Janatella leucodesma (C. & R. Felder, 1861)	4
Siproeta stelenes (Fruhstorfer, 1907)	2
Tigridia acesta (Linnaeus, 1758)	1
Satyrinae	
Caligo brasiliensis Fruhstorfer, 1904	2
Catoblepia orgetorix Bristow, 1981	1
Chloreuptychia arnaca (Fabricius, 1776)	5
Cissia pseudoconfusa Singer, DeVries & Ehrlich, 1983	1
Cissia sp. 2	1
Cissia terrestris (Butler, 1867)	5
Cithaerias pireta (Stoll, 1780)	64
Euptychia mollis Staudinger, 1875	5
Hermeuptychia sp. 1 near but not *hermes* (Fabricius, 1775)	1

Magneuptychia agnata (Schaus, 1913)	3
Magneuptychia libye (Linnaeus, 1767)	1
Morpho helenor Kollar, 1850	11
Morpho menelaus Deyrolle, 1860	9
Pareuptychia binocula (Butler, 1869)	22
Pierella luna (Fabricius, 1793)	210
Taygetis leuctra Butler, 1870	5
PAPILIONIDAE	
Papilioninae	
Parides childrenae (Gray, 1832)	3
Parides erithalion sadyattes (Druce, 1874)	1
Parides erithalion smalli Brown, 1994	15
Parides eurimedes (Godman & Salvin, 1890)	2
Parides sesostris (Boisduval, 1836)	12
PIERIDAE	
Coliadinae	
Eurema albula (C. & R. Felder, 1861)	4
Phoebis argante (Fabricius, 1775)	6
Phoebis sennae (Cramer, 1777)	1
Phoebis sp. 1 near *argante* (Fabricius, 1775)	1
Pierinae	
Glutophrissa drusilla (Lamas, 1981)	6
Itaballia demophile (Linnaeus, 1758)	64
Itaballia pandosia (Fruhstorfer, 1907)	74
Itaballia sp. 1 near *demophile* (Linnaeus, 1758)	1
RIODINIDAE	
Riodininae	
Ancyluris inca (Saunders, 1850)	2
Argyrogrammana crocea (Godman & Salvin, 1878)	1
Calephelis iris (Staundinger, 1876)	2
Detritivora hermodora (C. & R. Felder, 1861)	118
Eurybia cyclopia Stichel, 1910	1
Eurybia lycisca Westwood, 1851	1
Eurybia patrona Weymer, 1875	1
Hyphilaria parthenis (Westwood, 1851)	1
Juditha caucana (Stichel, 1911)	4
Leucochimona iphias Stichel, 1909	1
Mesosemia hesperina Butler, 1874	38
Mesosemia lamachus Hewitson, 1857	2
Metacharis victrix (Hewitson, 1870)	27
Nymphidium haematostichum Godman & Salvin, 1878	1
Perophthalma tullius (Fabricius, 1787)	11